In the Claims:

Please add claims 36 to 44.

Please cancel claim 16 and amend claims 14, 15, 17 to 35 as follows:

1. through 13. (Cancelled)

14. (Currently Amended) A method of conducting an optical inspection of a specimen in association with an optical disc and at least one optical reader, said method comprising the steps of:

providing a specimen support surface associated with said optical disc;

providing a first optical detector and a second optical detector;

providing an optically readable ~~position and tracking~~ encoded information in association with said optical disc; ~~to be read by said optical reader in association with said optical disc;~~

reading said encoded information with ~~an~~ said at least one optical reader; ~~and~~

optically inspecting said specimen using a light source; and ~~at least two light detectors.~~

separately measuring a first output from said first optical detector and a second output from said second optical detector.

15. (Currently Amended) The method of claim 14 wherein said step of optically inspecting said specimen includes the use of three light detectors.

16. (Cancelled)

17. (Currently Amended) The method of claim 14 ~~16 including~~ further comprising:

providing a third optical detector; and

separately measuring ~~the~~ a third output ~~of a~~ from said third optical detector ~~output~~.

18. (Currently Amended) The method of claim 17 ~~16~~ including comparing ~~the~~ said first ~~detector~~ output and ~~the~~ said second ~~detector~~ output to produce a ratio thereof.

19. (Currently Amended) The method of claim 18 including using ~~a measured output of a~~ said first ~~detector~~ output and said ratio in an analysis of the inspection of said specimen.

20. (Currently Amended) The method of claim 19 including using ~~a measured output of a~~ said third ~~detector~~ output in said analysis.

21. (Currently Amended) The method of any one of claims ~~14 through 20~~ 14, 15, 17, 18, 19 or 20 wherein said ~~at least two~~ first and second optical detectors are positioned on opposite sides of said optical disc.

22. (Currently Amended) The method of claim 15 wherein a first ~~one~~ detector of said three light detectors is on one side of said optical disc and a second detector and a third detector of said three light detectors is on an opposite side of said optical disc relative to said first detector.

23. (Currently Amended) The method of claim 21 wherein ~~a first one of said detectors~~ said first optical detector reads reflected light modulated by said encoded information (of said) on said optical disc.

24. (Currently Amended) The method of claim 23 wherein ~~a second one of said detectors~~ said second optical detector reads light transmitted through said optical disc.

25. (Currently Amended) The method of claim 24 wherein said second optical detector ~~one of said detectors~~ reads light transmitted through said encoded information after interaction of said transmitted light with ~~a respective~~ said specimen.

26. (Currently Amended) The method of claim 25 wherein ~~a~~ said third optical detector reads light transmitted through said encoded information after interaction of said transmitted light with ~~a respective~~ said specimen.

27. (Currently Amended) The method of claim 26 wherein an analysis of said specimen uses ~~the reading of a~~ said third output ~~detector~~ only when ~~the reading of a~~ said second output ~~detector~~ or the ratio of ~~the reading of a~~ said first output ~~detector~~ relative ~~a~~ said second output ~~detector~~ exceeds a predetermined value.

28. (Currently Amended) A method for carrying out an optical inspection and analysis of a biological specimen in association with a computer, said method comprising the steps of:

providing an optically readable ~~position~~ encoded information in conjunction with an optical disc capable of being scanned and read by an optical reader associated with ~~a~~ said computer;

providing a sample support surface associated with said optical disc;

placing ~~providing~~ a biological specimen ~~for optical inspection of a sample~~ within said sample support surface ~~associated with said optical disc~~;

optically inspecting said specimen with a light source and a detector system and producing a first data stream suitable for input to ~~a~~ said computer; and

optically reading the encoded information ~~of~~ on said optical disc and producing a second data stream suitable for input to ~~a~~ said computer, said detector system for optically inspecting said specimen including a first detector on one side of said optical disc and a second detector on an opposite side of said optical disc.

29. (Currently Amended) The method of claim 28 wherein said encoded information is provided in a partially light reflective and partially light-transmissive layer within said optical disc.

30. (Currently Amended) The method of claim 29 wherein ~~the~~ a first output of said first detector and ~~the~~ a second output of said second detector are compared in a ratio which is used in ~~said~~ producing said first data stream.

31. (Currently Amended) The method of ~~any one of claims~~ either claim 29 ~~and~~ or 30 wherein said first detector reads reflected light modulated by said encoded information and said first ~~detector~~ output is used in ~~said~~ producing said second data stream.

32. (Currently Amended) The method of claim 28 wherein a third detector is provided on said opposite side of said optical disc.

33. (Currently Amended) The method of claim 32 wherein said third detector is used in ~~said~~ producing said first data stream.

34. (Currently Amended) The method of claim 33 wherein said third detector is provided to be used when ~~the output of~~ said second output ~~detector~~ or a ratio of said first and second ~~detector~~ output exceed a predetermined value.

35. (Previously Presented) The method of claim 34 wherein said third detector is provided to increase the resolution with which the surface of the disc is read relative that of said second detector.

36. (New) A method of conducting an optical inspection of a specimen in association with an optical disc, said method comprising the steps of:

providing a specimen support surface associated with said optical disc;

optically inspecting said specimen using a light source, a first detector and a second detector; and

separately measuring a first output from said first detector and a second output from said second detector.

37. (New) The method according to claim 36 further comprising the step of providing an optically readable encoded information in conjunction with said optical disc.

38. (New) The method according to claim 37 wherein said optically readable encoded information is provided in a partially light-reflective and partially light-transmissive layer within said optical disc.

39. (New) The method according to claim 38 wherein said first output and said second output are compared in a ratio to produce a first data stream.

40. (New) The method according to claim 39 wherein said first detector reads reflected light modulated by said optically readable encoded information and said first output said first detector is used to produce a second data stream.

41. (New) The method according to claim 40 further comprising the step of providing a third detector on the same side of said optical disc as said second detector and on the opposite side of said first detector.

42. (New) The method according to claim 41 wherein said third detector is used in producing said first data stream.

43. (New) The method according to claim 42 wherein said third detector is provided to be used when said second output or a ratio of said first output and said second output exceed a predetermined value.

44. (New) The method according to claim 43 wherein said third detector is provided to increase the resolution with which the surface of the disc is read relative that of said second detector.